. COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

BRENDA J. PHI	COMPLAINANT)))
vs.) CASE NO. 91-477
LOUISVILLE GA	S AND ELECTRIC COMPANY	x (
	DEFENDANT	3

ORDER

This action involves a billing dispute. Brenda J. Philpot alleges that the Louisville Gas & Electric Company ("LG&E") has improperly billed her \$571.49. LG&E contends the amount in question is owed for previously unbilled electric service. At issue is the amount of unbilled electric service, if any, which Ms. Philpot received. Finding that Ms. Philpot received \$479.12 in unbilled electric service, we deny her complaint in part and grant it in part.

LG&E has provided electric and natural gas service to Ms. Philpot's home in Jefferson County since 1989. Ms. Philpot's house, which has approximately 1360 square feet in floor space, is heated by a gas furnace and cooled by central air conditioning. The house has a gas water heater. It also has two large refrigerators, a freezer, an electric range, and several televisions. Ms. Philpot lives with her fiancee and college-age

daughter. Prior to September 1991, another college-age daughter also lived there.

On October 8, 1991, an LG&E meter reader discovered that Ms. Philpot's electric meter had ceased registering electricity usage. LG&E removed and tested the meter and found it had an open potential coil pot link. It then reviewed Ms. Philpot's usage records. These records revealed a significant drop in Ms. Philpot's electricity usage beginning in May 1991. Based on its review of these records, LG&E concluded that Ms. Philpot's meter began malfunctioning in May 1991.

LG&E estimated Ms. Philpot's actual usage based on her historic usage. It determined her base usage to be 1200 KW per month. To determine her air conditioning load, it determined the number of cooling degree days in each billing period in 1989 and 1990. Based upon the number of cooling degree days and her actual usage, LG&E estimated that Ms. Philpot used 3.5 KW for air conditioning for each cooling degree day in a month. Multiplying 3.5 KW by the number of cooling degree days in each month in question and adding their product to 1200 KW, LG&E arrived at Ms. Philpot's usage.

Cooling degree day serves as an index of air conditioning requirements during the year's warm months. Environmental engineers have found that when the daily average temperature is higher than 65 degrees, most buildings require air conditioning to maintain an inside temperature of 70 degrees. Each degree that the average temperature is above 65 is counted as one cooling degree day. After obtaining the average daily temperature, the base 65 is subtracted from the resulting figure to determine the cooling degree day total. U.S. Dept. of Commerce, Environmental Information Summaries C-14, Heating and Cooling Degree Data 1-2 (1985).

After obtaining this estimate, LG&E made several adjustments to reflect additional information provided by Ms. Philpot. First, to reflect Ms. Philpot's claim that her air conditioner was not functioning in June 1991, LG&E removed all load attributed to air conditioning for that month. Next, it reduced the estimated usage by 20 percent to reflect the frequent absences of Ms. Philpot's daughters. Finally, it reduced the estimated usage for August 1991 by 50 percent to reflect that Ms. Philpot was vacationing and her house was thus vacant for two weeks in August 1991. Based upon these adjustments, LG&E determined that Ms. Philpot should be backbilled for \$571.49.

Ms. Philpot objects to the backbilling. She contends that LG&E has provided no proof that her meter was not properly registering before October 8, 1991. She further contends that LG&E's estimated usage is erroneous in that it is based in part on 1990 usage figures. Ms. Philpot's mother was residing in her home in 1990, but not during the disputed period. Finally, Ms. Philpot contends that LG&E failed to consider the increased efficiency of her recently repaired air conditioner.

The Commission finds little merit to Ms. Philpot's first contention. The significant decline in Ms. Philpot's usage in May 1991 and its great variance from earlier years is substantial evidence that her electric meter had malfunctioned. Commission Regulation 807 KAR 5:006, Section 10(2), permits a utility to use a customer's historical usage data to determine whether a billing error has occurred and the extent of such error. The assumptions

used by LG&E to calculate the billing error ensure that any error in the calculation will more likely be borne by LG&E.

We concur with Ms. Philpot's contention that LG&E's estimated usage is erroneous. Ms. Philpot testified that her mother lived in her home during 1990. LG&E's witness testified that the presence of Ms. Philpot's mother was not factored into the usage He further testified that the presence of an estimates. additional person in the house could affect electricity usage by as much as 20 percent. LG&E had, in fact, adjusted Ms. Philpot's estimated usage downward by that amount to reflect the departure The Commission finds that, to be of one of her daughters. consistent with LG&E's own methodology, a 20 percent reduction in electricity usage is required to reflect the absence of Ms. Philpot's mother. This reduction leaves approximately \$479.21 owed by Ms. Philpot for unbilled service. 3

With the reduction, Ms. Philpot's usage and bill are as follows:

Month	Usage	Amount
November	1646	81.61
October	1142	70.78
September	1723	138.78
August	935	74.47
July	1119	90.45
June	1430	115.40

The Commission believes that the calculation of unbilled service received as a result of metering malfunctions is dependent upon the individual circumstances of each case. Our acceptance of the proposition that an individual's presence or absence may produce a change in a structure's electricity usage is limited to this case and should not be construed as precedent for future Commission proceedings.

As to Ms. Philpot's final contention, the Commission finds no evidence in the record to support the claim that the energy efficiency of her air conditioner increased after its repair.

IT IS THEREFORE ORDERED that:

- Ms. Philpot's complaint is granted in part and denied in part.
- 2. LG&E shall not bill, assess, nor attempt to collect more than \$479.21 for the unbilled electric service which Ms. Philpot received as a result of malfunctioning meter between May 10, 1991 and October 8, 1991.

Done at Frankfort, Kentucky, this 8th day of June, 1992.

PUBLIC SERVICE COMMISSION

Chairman

Vice Chairman

Campiaga

ATTEST:

Executive Director, Acting